

INVESTIGATOR'S ANNUAL REPORT

National Park Service

All or some of the information provided may be available to the public

Reporting Year: 1992	Park: Shenandoah NP
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Name: Ms Elisabeth Hildebrand Phone: n/a Email: n/a	
Permit#: SHEN1992AEDH	
Park-assigned Study Id. #: unknown	
Project Title: Occurrence and severity of ozone injury on sensitive hardwood species in selected eastern National Parks	
Permit Start Date: Jan 01, 1998	Permit Expiration Date Jan 01, 1998
Study Start Date: Jan 01, 1991	Study End Date Jan 01, 1993
Study Status: Completed	
Activity Type: Other	
Subject/Discipline: Air Quality	
Objectives: 1. Evaluation of ozone sensitive species with Trend Plots established peripheral to the three existing ozone monitoring stations within the SNP. These plots were to be established during August and early September; concomitant 1991 seasonal ozone monitoring data remains yet to be obtained for analysis of exposure response. ;2. Determine the ontogeny of foliar ozone induced injury on black cherry at two week intervals with correlation to increasing ozone exposure indices.	
Findings and Status: Preliminary 1992 results showed that ozone induced injury appeared on 13, 75, and 10 percent of black cherry, on 17, 7 and 80 percent of yellow poplar and 27, 40, and 37 percent white ash in the Dickey Ridge, Big Meadows, and Sawmill Run Trend Plots respectively. We are awaiting ozone data from the monitoring and Data Analysis Branch of the Air Quality Division, NPS at Lakewood, CO.;Symptoms first appeared at the Big Meadows site when symptoms were also most extensive and intensive on a season long basis in comparison to the other sites. Ozone induced foliar symptoms were first noted on June 29 and were fully manifested by July 13 at theBig Meadows plot; symptoms did not appear at the Dickey Ridge or Sawmill Run plots until August 24. Once again we are awaiting the ozone exposure statistics for each sampling interval of the 1992 growing season.	
For this study, were one or more specimens collected and removed from the park but not destroyed during analyses? No	
Funding provided this reporting year by NPS: 47105	Funding provided this reporting year by other sources: 0
Fill out the following ONLY IF the National Park Service supported this project in this reporting year by providing money to a university or college	
Full name of college or university:	Annual funding provided by NPS to university or college this reporting year:

